CHAPTER 3

ACADEMIC TRAINING

SECTION A. GENERAL INSTRUCTIONS/COURSEWARE

- **3-1.** Changes 325 OSS/CC may publish changes to academic program content and flow based on ongoing courseware revision and development. 325 OSS/CC will post such changes via an intermediate change (IMC) disseminated by official message traffic to all syllabus addresses after coordination with counterparts at 114 FS/ED and receiving concurrence from HQ AETC/DOFF. 173 OG may initiate academic changes through 325 OSS/CC. Use of IMC is restricted to academic changes, and only those academic changes not affecting number of training days, training devices, policy, or sorties.
- **3-2. Content** This syllabus outlines the material to be covered in each academic block of instruction. Specific objectives are published separately.
- **3-3. Sequence** The academic blocks of instruction sequencing will progress IAW the course map. This schedule ensures correct interface of academic, sim, and flying training.
- **3-4. Examinations** Academic instructors will prepare student examinations as indicated in this syllabus. Examinations will be reviewed and approved by the F-15 Operations Training Development (OTD) team before integration into the training program.
- **3-5. Academic Standards** Minimum academic passing grade for all tests is 85%. All missed items will be individually reviewed by the instructor and the student during the critique. A student who fails an examination will receive the necessary additional instruction and take a parallel examination.
- **3-6.** Course Critiques Critiques for each academic block of instruction will be forwarded to the F-15 OTD Team. The F-15 OTD Team will review all suggestions for course modification and, if approved, they will be integrated into this syllabus.
- **3-7. Computer-Based Instructional Training (CBITS)** Students will accomplish CBITS courses IAW normal syllabus flow. An instructor will be present to answer questions pertaining to the computer-based lesson. Students must complete CBITS lessons prior to associated tests and/or related coursed IAW the syllabus flow. All CBITS lessons have titles ending with the letter "C".
- **3-8.** Academic Lessons The following is a comprehensive list of academic training. The asterisked lessons have associated study materials that must be accomplished in preparation for the lecture/CBITS session. Lessons will be reviewed and approved by the F-15 OTD Team before integration into the training program.

COURSE	CHRIECT	В	1/11.	2/21	2	21.	3c	2.1
TITLE	SUBJECT	Course	1a/1b Hours	2a/2b 2c/2d	3a Hours	3b Hours	Hours	3d Hours
		Hours		Hours				
ST 1	Flying Squadron Welcome	3.0	3.0	3.0	3.0	3.0	3.0	0.0
ST 2	Wing Commander's Briefing	1.0	0.0	0.0	0.0	0.0	0.0	0.0
ST 3	Flight Commander's Briefing	1.0	1.0	1.0	1.0	1.0	1.0	0.0
ST 4	9mm Small Arms Training	4.0	4.0	4.0	0.0	0.0	0.0	0.0
ST 5	Conversion Phase Briefing	1.0	1.0	1.0	1.0	1.0	1.0	0.0
ST 6	IFF Graduate Evaluation Critique	1.0	0.0	0.0	0.0	0.0	0.0	0.0
ST 7	Live Gun Briefing	1.0	1.0	0.0	0.0	0.0	0.0	0.0
ST 8	Course Critique/Equipment Turn-in	1.0	1.0	1.0	1.0	1.0	1.0	1.0
SPECIAL T	OPICS	13.0	11.0	10.0	6.0	6.0	6.0	1.0
CPT	Norm Procedures Fam - Squadron Practice	1.0	1.0	1.0	1.0	1.0	1.0	1.0
SEPT	Situational Emergency Procedures Training (2xMo)	1.0	1.0	1.0	1.0	1.0	1.0	0.0
COCKPIT	PROCEDURES TRAINER	2.0	2.0	2.0	2.0	2.0	2.0	1.0
IRC	Instrument Refresher Course	6.0	6.0	6.0	6.0	6.0	6.0	0.0
MISSION S	UPPORT	6.0	6.0	6.0	6.0	6.0	6.0	0.0
HF 1	Human Performance Enhancement	1.0	1.0	1.0	1.0	1.0	1.0	0.0
*HF 2	Cockpit Resource Mgmt -Core Concepts	2.0	2.0	2.0	2.0	2.0	2.0	2.0
*HF 3	CRM – Element Employment	1.0	0.0	0.0	0.0	0.0	0.0	0.0
*HF 4	CRM – LASDT/NINT/Complex Missions	1.0	0.0	0.0	0.0	0.0	0.0	0.0
HUMAN FA	HUMAN FACTORS		3.0	3.0	3.0	3.0	3.0	2.0
LS 1C	CBITS - Local Area Surv/LS Training	1.0	0.0	0.0	0.0	0.0	0.0	0.0
LS 2	Local Area Survival/Life Support Training	2.5	2.5	2.5	2.5	2.5	2.5	0.0
LS 3	Ejection Seat/Hanging Harness	1.5	1.5	1.5	1.5	1.5	1.5	0.0
LS 4	Ejection Seat/Hanging Harness Continuation Training (1x/2Mo)	1.0	1.0	1.0	1.0	1.0	1.0	0.0
LIFE SUPP	ORT	6.0	5.0	5.0	5.0	5.0	5.0	0.0
ACGSIM	Aircraft General Sim	1.5	1.5	0.0	0.0	0.0	0.0	0.0
RDRSM1	Radar Sim (Basics)	3.0	3.0	0.0	0.0	0.0	0.0	0.0
RDRSM2	Radar Sim (Basic Employment)	3.0	3.0	0.0	0.0	0.0	0.0	0.0
RDRSM3	Radar Sim (Advanced Radar)	1.5	1.5	0.0	0.0	0.0	0.0	0.0
NVGSIM	NVG Familiarization Sim	1.5	1.5	1.5	0.0	0.0	1.5	0.0
SIMULATO	OR ACADEMIC SUPPORT	10.5	10.5	1.5	0.0	0.0	1.5	0.0
*AAR	Air-to-Air Refueling	1.5	1.5	0.0	0.0	0.0	0.0	0.0
AIR-TO-AI	R REFUELING	1.5	1.5	0.0	0.0	0.0	0.0	0.0
*ACG 1	Welcome and Course Introduction	2.0	1.5	1.5	1.5	1.5	1.5	1.5
*ACG 2	Propulsion System	4.5	4.5	4.5	4.5	4.5	4.5	4.5
*ACG 3	Electrical System	2.5	2.0	2.0	2.0	2.0	2.0	2.0
*ACG 4	Fuel System	2.5	2.5	2.5	2.5	2.5	2.5	2.5
*ACG 5	Hydraulic System	3.0	3.0	3.0	3.0	3.0	3.0	3.0
*ACG 6	Flight Controls	2.5	2.5	2.5	2.5	2.5	2.5	2.5
*ACG 7	Environmental Control System & Canopy	1.5	1.5	1.5	1.5	1.5	1.5	1.5
*ACG 8C	CBITS - Selected Emergency Procedures	3.0	2.0	2.0	2.0	2.0	2.0	2.0
ACGFTD	FTD Visit	3.0	0.0	0.0	0.0	0.0	0.0	0.0
AIRCRAFT GENERAL		24.5	19.5	19.5	19.5	19.5	19.5	19.5
*AVI 1	Avionics Introduction	1.5	1.5	1.5	1.5	1.5	1.5	1.5
*AVI 2C	CBITS - Basic Avionics	2.0	2.0	2.0	2.0	2.0	2.0	2.0
*AVI 3C	CBITS - Inertial Navigation System	2.0	2.0	2.0	2.0	2.0	2.0	2.0
*AVI 4C	CBITS - Advanced Avionics	2.5	2.5	2.5	2.5	2.5	2.5	2.5
*FDL 1	Fighter Data Link (FDL)	2.0	2.0	2.0	0.0	2.0	2.0	2.0
*FDL 2C	CBITS - FDL Employment	2.0	2.0	2.0	0.0	2.0	2.0	2.0
FDL 3	Advanced Suite 4	2.0	2.0	2.0	0.0	0.0	2.0	0.0

COURSE TITLE	SUBJECT	B Course Hours	1a/1b Hours	2a/2b 2c/2d Hours	3a Hours	3b Hours	3c Hours	3d Hours
FDL 4C	CBITS - Advanced Suite 4	1.0	1.0	1.0	0.0	0.0	1.0	0.0
USE C	CBITS - Unit Specific Equipment	2.0	2.0	2.0	0.0	0.0	0.0	0.0
AVIONICS		17.0	17.0	17.0	8.0	12.0	15.0	12.0
*AHC 1	Aircraft Handling Characteristics 1	3.0	3.0	3.0	3.0	3.0	3.0	3.0
*AHC 2	Aircraft Handling Characteristics 2	2.0	2.0	2.0	2.0	2.0	2.0	2.0
*FORM	Formation	1.0	1.0	0.0	0.0	0.0	0.0	0.0
	HANDLING CHARACTERISTICS	6.0	6.0	5.0	5.0	5.0	5.0	5.0
*RDR 1	Basic Radar Theory and F-15 Radar Characteristics	2.0	2.0	0.0	0.0	0.0	0.0	0.0
*RDR 2	F-15 Radar Controls and Displays	2.0	2.0	0.0	2.0	2.0	2.0	2.0
*RDR 3C	CBITS- F-15 Radar Controls and Displays	2.0	2.0	2.0	2.0	2.0	2.0	0.0
*RDR 4	F-15 Radar, Basic Weapons Employment and ID	3.0	3.0	0.0	3.0	3.0	3.0	0.0
*RDR 5C	CBITS - F-15 Radar, Basic Weapons Employment and ID Exercises	2.0	2.0	2.0	2.0	2.0	2.0	0.0
*RDR 6	Advanced Radar	2.0	2.0	2.0	0.0	2.0	2.0	0.0
*RDR 7C	CBITS - Advanced Radar Exercise / Switchology	2.0	2.0	2.0	0.0	2.0	2.0	0.0
*RDR 8	Radar Timeline	1.5	1.5	1.5	0.0	0.0	0.0	0.0
*RDR 9	Radar Electronic Attack	2.0	2.0	2.0	0.0	0.0	2.0	0.0
*RDR 10	F-15 Electronic Protection	3.0	3.0	3.0	0.0	3.0	3.0	0.0
F-15 RADA	R	21.5	21.5	14.5	9.0	16.0	18.0	2.0
*WPN 1	Weapons Employment Gun	2.0	2.0	2.0	0.0	0.0	2.0	0.0
*WPN 2	F-15 Employment Introduction, AIM-9/7/120	2.0	2.0	0.0	0.0	0.0	0.0	2.0
*WPN 3	Weapons Employment AIM-9M	2.5	2.5	2.5	0.0	0.0	2.5	0.0
*WPN 4	Weapon Employment AIM-7	3.0	3.0	3.0	0.0	0.0	3.0	0.0
*WPN 5	Weapon Employment AIM-120	3.0	3.0	3.0	0.0	0.0	3.0	0.0
WPN 6	Weapon Employment AIM-9X	2.0	2.0	2.0	0.0	0.0	2.0	0.0
	EMPLOYMENT	14.5	14.5	12.5	0.0	0.0	12.5	2.0
ATI 1	Advanced Theater Intelligence 1	3.5	3.5	1.0	0.0	1.0	1.0	0.0
ATI 2	Advanced Theater Intelligence 2	3.0	3.0	2.0	0.0	2.0	2.0	0.0
ATI 3	Advanced Theater Intelligence 3	3.0	3.0	2.0	0.0	2.0	2.0	0.0
ATI 4C	CBITS - Advanced Theater Intelligence 4	1.0	1.0	0.0	0.0	0.0	0.0	0.0
	Advanced Theater Intelligence 5	1.0				0.0	1.0	
	D THEATER INTEL	11.5	11.5	6.0	0.0	5.0	6.0	0.0
*TEWS 1	TEWS - RWR TEWS - ICS, CMD, EWWS	2.0	2.0	2.0	0.0	2.0	2.0	0.0
*TEWS3C	CBITS - Tactical Electronic Warfare Systems	1.0	1.0	1.0	0.0	1.0	1.0	0.0
	CB115 - Tactical Electronic Warrance Systems		ļ					
*CID	Combat Identification	5.0 2.0	5.0 2.0	5.0 2.0	0.0	5.0 0.0	5.0 2.0	0.0
*FTR	TIFICATION Fighter Comparison	2.0 2.0	2.0 2.0	2.0 0.0	0.0	0.0	2.0 0.0	0.0
	COMPARISON	2.0	2.0	0.0	0.0	0.0	0.0	0.0
*GCI	Pilot/Weapons Director Interface	3.5	3.5	0.0	0.0	0.0	0.0	0.0
*BI 1	Basic Intercepts - 1	2.5	2.5	0.0	0.0	0.0	0.0	0.0
*BI 2	Basic Intercepts - 2	2.5	2.5	0.0	0.0	0.0	0.0	0.0
INTERCEPTS		8.5	8.5	0.0	0.0	0.0	0.0	0.0
MP 1	Cross Country Flight Planning (PFPS)	1.5	1.5	0.0	0.0	0.0	0.0	0.0
*MP 2	AFMSS Introduction/Lab	2.5	2.5	2.5	0.0	0.0	2.5	0.0
*MP 3	AFMSS Mission Planning Exercise	2.0	0.0	0.0	0.0	0.0	0.0	0.0
*MP 4	AFMSS Evaluation	3.0	0.0	0.0	0.0	0.0	0.0	0.0
MISSION P	LANNING	9.0	4.0	2.5	0.0	0.0	2.5	0.0
*N 1	Introduction To NVGs	2.0	2.0	2.0	0.0	0.0	2.0	0.0
*N 2C	CBITS - NVG Environment	1.0	1.0	1.0	0.0	0.0	1.0	0.0
*N 3C	CBITS - NVG Adjustment	1.5	1.5	1.5	0.0	0.0	1.5	0.0

COURSE	SUBJECT	В	1a/1b	2a/2b	3a	<i>3b</i>	3c	3d
TITLE		Course Hours	Hours	2c/2d Hours	Hours	Hours	Hours	Hours
*N 4	NVG Physiological Factors	1.5	1.5	1.5	0.0	0.0	1.5	0.0
*N 5	F-15 Night Employment	2.0	2.0	2.0	0.0	0.0	2.0	0.0
NIGHT VIS	SION GOGGLES	8.0	8.0	8.0	0.0	0.0	8.0	0.0
IN 1	Intelligence Course Overview	1.0	0.0	0.0	0.0	0.0	0.0	0.0
IN 2	Introduction to Visual Recognition	1.0	0.0	0.0	0.0	0.0	0.0	0.0
IN 3	Air to Air Threats	3.0	0.0	0.0	0.0	0.0	0.0	0.0
IN 4	Surface to Air Threats	3.0	0.0	0.0	0.0	0.0	0.0	0.0
IN 5	Threat Training and Tactics	3.0	0.0	0.0	0.0	0.0	0.0	0.0
IN TX	Intelligence Review (TX)	0.0	2.0	2.0	0.0	0.0	0.0	0.0
INTELLIG	-	11.0	2.0	2.0	0.0	0.0	0.0	0.0
*AA 1	Offensive Basic Fight Maneuvers	2.0	2.0	2.0	0.0	0.0	2.0	0.0
*AA 2	Defensive Basic Fighter Maneuvers	2.0	2.0	2.0	0.0	0.0	2.0	0.0
*AA 3	High Aspect Basic Fighter Maneuvers	2.0	2.0	2.0	0.0	0.0	2.0	0.0
*AA 4	Tactical Intercepts (1V1)	2.0	2.0	0.0	0.0	0.0	2.0	0.0
*AA 5	Defensive Air Combat Maneuvers	2.0	2.0	0.0	0.0	0.0	0.0	0.0
*AA 6	BVR Shot/Kill	2.0	2.0	2.0	0.0	2.0	2.0	0.0
*AA 7	All Aspect Air Combat Maneuvers	2.0	2.0	2.0	0.0	0.0	2.0	0.0
*AA 8	Low Altitude Employment	2.0	2.0	1.5	0.0	0.0	1.5	0.0
*AA 9	Tactical Intercepts (2VX)	2.0	2.0	2.0	0.0	2.0	2.0	0.0
*AA 10	Mission Employment	2.0	2.0	0.0	0.0	0.0	2.0	0.0
*AA 11	4-Ship Employment	2.0	2.0	2.0	0.0	0.0	0.0	0.0
AIR-TO-AI	R EMPLOYMENT	22.0	22.0	15.5	0.0	4.0	17.5	0.0
CMP	Combat Mission Planning Brief	4.0	0.0	0.0	0.0	0.0	0.0	0.0
COMBAT N	MISSION PLANNING	4.0	0.0	0.0	0.0	0.0	0.0	0.0
IRC T	Instrument Refresher Course Test	2.0	2.0	2.0	2.0	2.0	2.0	0.0
S/E T	Stan/Eval Tests	3.0	3.0	3.0	3.0	3.0	3.0	0.0
ACG T	Aircraft General Test	2.5	2.5	2.5	0.0	0.0	2.5	0.0
AVI T	Avionics Test	2.0	0.0	0.0	0.0	0.0	0.0	0.0
FDL T	FDL Test	1.5	1.5	1.5	0.0	0.0	0.0	0.0
AHC T	Aircraft Handling Characteristics Test	2.0	0.0	0.0	0.0	0.0	0.0	0.0
AV/AHT	Avionics/AHC Test (TX)	0.0	2.0	2.0	0.0	0.0	2.0	0.0
FORM T	Formation Test	1.0	0.0	0.0	0.0	0.0	0.0	0.0
RD1-5T	Radar 1-5 Test	1.5	1.5	0.0	0.0	0.0	0.0	0.0
RD3,5T	Radar 3 and 5 Test (TX)	0.0	0.0	1.5	0.0	0.0	1.5	0.0
RD6-7T	Radar 6-7 Test	1.0	1.0	1.0	0.0	0.0	1.0	0.0
R9-10T	Radar 9-10 Test	1.5	1.5	1.5	0.0	0.0	1.5	0.0
WP1-2T	Weapons 1-2 Test	2.0	2.0	0.0	0.0	0.0	0.0	0.0
WP3-4T	Weapons 3-4 Test	2.0	0.0	0.0	0.0	0.0	0.0	0.0
WPN 5T	Weapons 5 Test	2.0	0.0	0.0	0.0	0.0	0.0	0.0
WP3-5T	Weapons 3-5 Test (TX)	0.0	2.0	2.0	0.0	0.0	2.0	0.0
ATI T	Advanced Theater Intelligence 1-4 Test	1.0	1.0	1.0	0.0	0.0	1.0	0.0
TEWS T	Tactical Electronic Warfare Systems Test	2.0	2.0	1.5	0.0	0.0	1.5	0.0
CID T	Combat Identification Test	1.0	1.0	1.0	0.0	0.0	1.0	0.0
GCIBIT	Pilot/WD Interface & Basic Intercept Test	1.5	1.5	0.0	0.0	0.0	0.0	0.0
NT	Night Test	1.0	1.0	1.0	0.0	0.0	1.0	0.0
IN T	Intelligence Test	2.0	0.0	0.0	0.0	0.0	0.0	0.0
AA 1T	OBFM Test	1.0	1.0	0.0	0.0	0.0	0.0	0.0
AA 2T	DBFM Test	1.0	1.0	0.0	0.0	0.0	0.0	0.0
AA 3T	HABFM Test	1.0	1.0	0.0	0.0	0.0	0.0	0.0
AA 4T	Radar Timeline and TI (1V1) Test	1.5	1.5	0.0	0.0	0.0	0.0	0.0
AA 5T	DACM Test	1.5	1.5	0.0	0.0	0.0	0.0	0.0
AA 6T	BVR Shot/Kill Test	1.0	1.0	1.0	0.0	0.0	0.0	0.0
AA 7T	AAACM Test	1.5	1.5	0.0	0.0	0.0	0.0	0.0

COURSE TITLE	SUBJECT	B Course Hours	1a/1b Hours	2a/2b 2c/2d Hours	3a Hours	3b Hours	3c Hours	3d Hours
AA 8T	LOWAT Test	1.0	1.0	0.0	0.0	0.0	0.0	0.0
AA 9T	TI (2VX) Test	1.0	1.0	1.0	0.0	0.0	0.0	0.0
AA 10T	Mission Employment Test	1.0	1.0	0.0	0.0	0.0	0.0	0.0
AA 11T	4 Ship Test	1.0	1.0	1.0	0.0	0.0	0.0	0.0
TB T	Top Book Test	2.0	0.0	0.0	0.0	0.0	0.0	0.0
ACADEMIC EXAMS 47.0 38.0 24.5 5.0 5.0 20.0 0.0						0.0		
ACADEMIC	CTOTALS	257.5	220.5	161.5	68.5	93.5	154.5	44.5

SECTION B. F-15 SPECIALIZED TRAINING (ST) - Includes the following:

FLYING SQUADRON WELCOME

ST 1 Lecture Classroom Time: 3.0 Hr

- 1. Collect Flight Evaluation Folder (FEF)
- 2. Pubs Issue
- 3. Local Flight Procedures
- 4. Grade Folder Procedures
- 5. Turn-in and Issue Personal Equipment

WING COMMANDER'S BRIEFING

ST 2 Lecture Classroom Time: 1.0 Hr

1. Welcome to the 325 FW

FLIGHT COMMANDER'S BRIEFING

ST 3 Lecture Classroom Time: 1.0 Hr

1. Welcome to the Squadron

9mm SMALL ARMS TRAINING

ST-4 Practicum Classroom/Range Time: 4.0 Hr

- 1. Fundamentals
- 2. Weapons Live Fire
- 3. Care/Cleaning/Maintenance

CONVERSION PHASE BRIEFING

ST 5 Lecture Classroom Time: 1.0 Hr

- 1. Phase Content
- 2. Regulation, Manuals, Study Materials
- 3. Local Area Operating Procedures
- 4. General Rules for Handling Eps and Crew Requirements
- 5. Supervised Preflight of F-15 Aircraft and Missiles

IFF GRADUATE EVALUATION CRITIQUE

ST 6 Critique Classroom Time: 1.0 Hr

1. Critique filled out by student's Flt/CC assessing how well IFF prepared student for Tyndall conversion training.

LIVE GUN BRIEFING (As Required)

ST 7 Lecture Classroom Time: 1.0 Hr

- 1. Objectives
- 2. Spins
- 3. Set-ups
- 4. Training Rules

END-OF-COURSE CRITIQUE/EQUIPMENT TURN-IN

ST 8 Lecture Classroom Time: 1.0 Hr

- 1. EOC Critique
- 2. Graduate Evaluation Program
- 3. Return Equipment
- 4. Return Publications

SECTION C. COCKPIT PROCEDURES TRAINER (CPT) - Includes the following:

NORMAL PROCEDURES FAMILIARIZATION - SQUADRON PRACTICE

CPT 1 Programmed Questioning
CPT Time: 1.0 Hr

- 1. Preflight Check
- 2. Starting Engines
- 3. Before Taxi/Taxi
- 4. Before Takeoff
- 5. Inflight Checks
- 6. After Landing/Engines Shutdown

SITUATIONAL EMERGENCY PROCEDURES TRAINING

SEPT 1-10 Programmed Questioning CPT/Classroom Time: 1.0 Hr/Ea

- 1. Emergency Procedures
- 2. Abnormal Operations

NOTES: (1) Proficiency knowledge at a "3" level is required for SEPT-1

- (2) SEPT 1 is required prior to first flight.
- (3) SEPT will be conducted twice monthly.
- (4) SEPT 2-10 are for continuation review.

SECTION D. MISSION SUPPORT - Includes the following:

INSTRUMENT REFRESHER COURSE (IRC)

IRC Lecture Classroom Time: 6.0 Hr

- 1. New/Revised Regulations
- 2. Instrument Procedures
- 3. Flight Planning
- 4. Weather
- 5. Spatial Disorientation

INSTRUMENT REFRESHER COURSE TEST

IRC T Examination
Classroom Time: 2.0 Hr

- 1. Instrument Procedures
- 2. General Flight Rules
- 3. Flight Planning Requirements
- 4. Spatial Disorientation
- 5. Weather
- 6. NOTAMS

SQUADRON/WING STAN EVAL TESTS

S/E T Examination
Classroom Time: 3.0 Hr

- 1. Master Question File (MQF)
- 2. Local Area MQF

SECTION E. HUMAN FACTORS (HF) - Includes the following:

HUMAN PERFORMANCE ENHANCEMENT (Non-Testable)

HF 1 Lecture Classroom Time: 1.0 Hr

- 1. Human Performance in the High-G Environment
- 2. Fighter Aircrew Conditioning Program (FACP)
- 3. Combat Edge

COCKPIT RESOURCE MANAGEMENT (CRM) – CORE CONCEPTS (Non-testable)

HF 2 Lecture Time: 2.0 Hr Classroom 1. CRM Core Concepts 2. Wingman Responsibilities 3. CRM Failure Recognition and Correction **CRM – ELEMENT EMPLOYMENT (Non-Testable)** HF 3 Lecture Classroom Time: 1.0 Hr Cockpit Resource Management in the Air-to-Air Arena 1. 2. Flight Integrity 3. Communication 4. Combating CRM Breakdown <u>CRM – COMPLEX MISSIONS (Non-Testable)</u> HF 4 Lecture Time: 1.0 Hr Classroom 1. CRM in the Complex Mission Arena 2. **CRM** Failure Analysis **SECTION F. F-15 LIFE SUPPORT (LS) -** Includes the following: CBITS - LOCAL AREA SURVIVAL/LIFE SUPPORT TRAINING LS₁C **CBITS** Classroom Time: 1.0 Hr 1. Cockpit Preflight 2. Canopy Controls 3. Ingress Procedures 4. Egress Procedures 5. Ejection Seat 6. Ejection Procedures 7. Post-Ejection Procedures LOCAL AREA SURVIVAL/LIFE SUPPORT TRAINING LS 2 Lecture Classroom Time: 2.5 Hr 1. Egress/Hanging Harness

2. Life Support Equipment

3. Local Area Survival Techniques

4. Water Survival Training (Academics Only)

INITIAL EJECTION SEAT/HANGING HARNESS

LS 3 Exercise EPT Time: 2.5 Hr

- 1. Ejection Seat Capabilities/Limitations
- 2. Preflight
- 3. Strap-in
- 4. Normal Ejection Procedures, Seat Failure and Manual Separation
- 5. Emergency Egress Procedures
- 6. Hanging Harness Training (as required)

EJECTION SEAT/HANGING HARNESS CONTINUATION TRAINING

LS 4 Exercise EPT Time: 1.0 Hr

- 1. Ejection Seat/Egress Training
- 2. Hanging Harness Training (if required)

NOTE: Training provided every two months.

SECTION G. SIMULATOR (SIM) ACADEMIC SUPPORT - Includes the following:

AIRCRAFT GENERAL SIM

ACGSIM Lecture/Demo
Sim Bldg Time: 1.5 Hr

- 1. Normal Start Procedures
- 2. Abnormal/Emergency Systems Indications
- 3. Introduction to Emergency Procedures

RADAR SIM 1 - BASICS

RDRSM1 Lecture/Demo Sim Bldg Time: 3.0 Hr

- 1. Review Radar Set Control (RSC)
- 2. Review Normal Search/Track Displays
- 3. Review HUD/VSD Weapon Displays
- 4. Review AAI

RADAR SIM 2 – BASIC EMPLOYMENT

RDRSM2 Lecture/Demo Sim Bldg Time: 3.0 Hr

- 1. Review/Discuss RSC settings.
- 2. Review HPRF/MPRF clutter filtering.
- 3. Review radar footprint considerations.
- 4. Review/Demonstrate unique VSD displays.

RADAR SIM 3 – ADVANCED RADAR

RDRSM3 Lecture/Demo Sim Bldg Time: 1.5 Hr

- 1. Review TWS Switchology and Displays
- 2. Review Standard Tactical Radar Employment
- 3. Review Weapons Engagement Zones/Valid Shot Parameters
- 4. Review Special Modes

NIGHT VISION GOGGLE FAMILIARIZATION SIM

NVGSIM Lecture/Demo Time: 1.5 Hr Sim Bldg

- 1. NVG systems operation
- 2. NVG-specific emergency procedures
- 3. NVG cockpit setup

SECTION H. AIR-TO-AIR REFUELING (AAR) - Includes the following:

AIR-TO-AIR REFUELING (Non-testable)

AAR Lecture Classroom Time: 1.5 Hr

- 1. Reference Materials
- 2. Rendezvous Procedures
- 3. Checklist Procedures
- 4. Refueling Procedures and Visual References
- 5. Post Refueling Procedures
- 6. Emergency Procedures and Abnormal Operations

SECTION I. F-15 AIRCRAFT GENERAL (ACG) - Includes the following:

WELCOME & COURSE INTRODUCTION

ACG 1 Lecture Classroom Time: 2.0 Hr (B) 1.5 Hr (Tk 1/2/3)

- 1. Course Administration
 - (a) Course Description
 - Course Flow (b)
 - Academics (c)
- 2. Aircraft Introduction
 - Roles (a)
 - (b) Performance
 - (c) Design Philosophy
 - Unique Aircraft Systems (d)

PROPULSION SYSTEM

ACG 2 Classroom		Lecture Time: 4.5 Hr
Classiooni	 System Description Capabilities and Limitations 	Time: 4.5 Ti
	3. Controls and Indicators4. Engine Start	
	 Engine Start Emergency Procedures and Abnormal Operations 	
	ELECTRICAL SYSTEM	
ACG 3 Classroom		Lecture Time: 2.5 Hr
	1. System Description	
	2. Capabilities and Limitations3. Controls and Indicators	
	4. Emergency Jettison System	
	5. Emergency Procedures and Abnormal Operations	
	FUEL SYSTEM	
ACG 4 Classroom		Lecture Time: 2.5 Hr
Ciassroom	1. System Description	11me: 2.5 Hr
	2. Normal and Emergency Transfer	
	3. Capabilities and Limitations4. Controls and Indicators	
	5. Emergency Procedures and Abnormal Operations	
	HYDRAULIC SYSTEM	
ACG 5		Lecture
Classroom	1. Cartan Description	Time: 3.0 Hr
	 System Description Controls, Indicators and Limits 	
	3. Sub-System Operations	
	4. Emergency Procedures and Abnormal Operations	
	5. Engine Start6. Emergency Procedures and Abnormal Operations	
	FLIGHT CONTROLS	
ACG 6		Lecture
Classroom		Time: 2.5 Hr
	1. System Description	
	2. Capabilities and Limitations3. Controls and Indicators	
	4. Flight Control Ground Checks	
	5. Emergency Procedures and Abnormal Operations	

ENVIRONMENTAL CONTROL SYSTEM (ECS) AND CANOPY

ACG 7 Lecture Classroom Time: 1.5 Hr

- System Description
- 2. Controls and Indicators
- 3. Emergency Procedures and Abnormal Operations

CBITS – SELECTED EMERGENCY PROCEDURES

ACG 8C CBITS
Lrn Center Time: 3.0 Hr

- 1. Starting
- 2. Ground Operations
- 3. Take-off4. Inflight
- 2. Landing

AIRCRAFT GENERAL FIELD TRAINING DETACHMENT VISIT (N/A for KINGSLEY)

ACGFTD Lecture FTD Bldg Time: 3.0 Hr

- 1. Landing Gear System Introduction
- 2. Canopy/Seat Egress System Introduction
- 3. Flight Control System Introduction
- 4. F100-PW-100 Engine Introduction
- 5. Secondary Power System Introduction
- 6. Avionics, Electro/Environmental, Weapons, Ammunition Systems

TEST AND CRITIQUE ON ACG 1-7

ACG T Examination
Lrn Center Time: 2.5 Hr

SECTION J. F-15 AVIONICS (AVI) - Includes the following:

AVIONICS INTRODUCTION

AVI 1 Lecture
Classroom Time: 1.5 Hr

- 1. Course Content and CBITS Procedures
- 3. HAVE QUICK Operations
- 4. Basic Fighter Data Link (FDL) Intro
- 5. FDL Net Entry Procedures / Ground Ops

CBITS – BASIC AVIONICS

AVI 2C CBITS
Lrn Center Time: 2.0 Hr

- 1. F-15 Avionics and Instruments (Basic Instruments, CC, ADC, Radios, HAVE QUICK, ADF, IFF)
- 2. Avionics BIT Operations

CBITS – INERTIAL NAVIGATION SYSTEM (INS)

AVI 3C CBITS Lrn Center Time: 2.0 Hr

- 1. System Description
- 2. Capabilities and Limitations
- 3. Controls and Indicators
- 4. Normal Operations (Align, Program, Mission Data Entry Update)
- 5. INS Navigation Modes
- 6. Emergency Procedures and Abnormal Operations

CBITS – ADVANCED AVIONICS

AVI 4C CBITS
Lrn Center Time: 2.5 Hr

- 1. System Description
- 2. Controls and Indicators
- 3. Display Interpretation (ADI Mode)
- 4. VTRs
- 5. Data Transfer Module
- 6. Multipurpose Color Display
- 7. CMD Safety Consideration
- 8. FDL Controls, Operations and Programming
- 9. FDL Displays and Switches
- 10. FDL Symbology
- 11. OWS System
- 12. HUD
- 13. Emergency Procedures and Abnormal Operations
- 14. Classroom AVI Interface

TEST AND CRITIQUE ON AVI 1-4C

AVI T Examination
Lrn Center Time: 2.0 Hr

FIGHTER DATA LINK (FDL)

FDL 1 Lecture
Classroom Time: 2.0 Hr

- 1. FDL Net Architecture
- 4. FDL Tactical Employment

CBITS – FDL EMPLOYMENT

FDL 2C CBITS Lrn Center Time: 2.0 Hr

- 1. FDL Employment Operations
- 2. FDL Displays and Symbology

TEST AND CRITIQUE ON FDL 1-2C

FDL T Examination
Lrn Center Time: 1.5 Hr

ADVANCED FDL EMPLOYMENT (Non-Testable)

FDL 3 Lecture Classroom Time: 2.0 Hr

1. Fighter Data Link Tactical Employment

CBITS – ADVANCED FDL EMPLOYMENT (Non-Testable)

FDL 4C CBITS
Lrn Center Time: 1.0 Hr

1. Fighter Data Link Tactical Employment

CBITS – UNIT SPECIFIC EQUIPMENT (Non-Testable)

USE C CBITS
Lrn Center Time: 2.0 Hr

1. APG-63V1/V2 Radar

- 2. Pratt & Whitney F100-PW220 Engines
- 3. Helmet Mounted Cueing System
- 4. GPS Navigation System
- 5. Advanced IFF
- 6. Miscellaneous

SECTION K. F-15 A/C HANDLING CHARACTERISTICS (AHC) - Includes the following:

AIRCRAFT HANDLING CHARACTERISTICS 1

AHC 1 Lecture
Classroom Time: 3.0 Hr

- 1. Basic Aerodynamic and Airframe Capabilities
- 2. Normal Operations/Handling Qualities
- 3. Maximum/Optimum Performance Handling for Turns and Acceleration
- 4. Recovery and Landing Procedures

AIRCRAFT HANDLING CHARACTERISTICS 2

AHC 2 Lecture Classroom Time: 2.0 Hr

- 1. Aircraft Limitations and Restrictions
- 2. Flight Characteristics Adverse Flight Regimes
- 3. Stall/Departure/Spin Characteristics and Recovery Procedures
- 4. Flight Control Malfunctions

TEST AND CRITIQUE ON AHC 1-2

AHC T Examination
Lrn Center Time: 2.0 Hr

TEST AND CRITIQUE ON AVI 1-4C & AHC 1-2 (TX)

AV/AHT Examination
Lrn Center Time: 2.0 Hr

1. Combined Avionics and AHC Test for TX Track 1A/B, 2A/B, and 3C

FORMATION

FORM Lecture Classroom Time: 1.0 Hr

- 1. Formation Position References and Rejoins
- 2. Formation Takeoffs and Landings
- 3. Day/Night Visual Signals
- 4. Review of Lost Wingman Procedures
- 5. Tactical Formation

TEST AND CRITIQUE ON FORM

FORM T Examination
Lrn Center Time: 1.0 Hr

SECTION L. F-15 RADAR - Includes the following:

BASIC RADAR THEORY AND F-15 RADAR CHARACTERISTICS

RDR 1 Lecture Classroom Time: 2.0 Hr

- 1. Basic Pulse Radar Principles
- 2. Basic Doppler Radar Principles
- 3. Basic PD Radar Principles
- 4. Effects of Ground Clutter/Side Lobe Clutter
- 5. Definition of Basic Radar Terms and Concepts
- 6. F-15 Radar Components and Operations

F-15 RADAR CONTROLS AND DISPLAYS

RDR 2 Lecture Classroom Time: 2.0 Hr

- 1. Controls and Indicators
- 2. BIT Operations
- 3. Switch Settings
- 4. VSD and HUD Information/Target Acquisition

CBITS – F-15 RADAR CONTROLS AND DISPLAYS

RDR 3C CBITS Lrn Center Time: 2.0 Hr

- 1. Controls and Indicators
- 2. BIT Operations
- 3. Switch Settings
- 4. VSD and HUD Information/Target Acquisition

F-15 RADAR, BASIC WEAPONS EMPLOYMENT AND IDENTIFICATION

RDR 4 Lecture
Classroom Time: 3.0 Hr

- 1. Normal Modes
- 2. Interface Failures
- 3. Employment
- 4. Auto Acquisition Modes: Advantages and Disadvantages
- 5. AAI, NCTR and EWWS Switchology and Displays

<u>CBITS – F-15 RADAR, BASIC WEAPONS EMPLOYMENT</u> <u>AND IDENTIFICATION EXERCISES</u>

RDR 5C CBITS
Lrn Center Time: 2.0 Hr

- 1. Normal Modes
- 2. Interface Failures
- 3. Employment
- 4. Auto Acquisition Modes: Advantages and Disadvantages
- 5. AAI, NCTR and EWWS Switchology and Displays

TEST AND CRITIQUE ON RDR 1-5C

RD1-5T Examination
Lrn Center Time: 1.5 Hr

TEST AND CRITIQUE ON RDR 3C & 5C (TX)

RD3,5T Examination
Lrn Center Time: 1.5 Hr

1. Radar Test for TX Track 2A/B and 3C.

ADVANCED RADAR

RDR 6 Lecture Classroom Time: 2.0 Hr

- 1. Track-While-Scan (TWS)
- 2. Special Modes

CBITS – ADVANCED RADAR EXERCISES/SWITCHOLOGY

RDR 7C CBITS Lrn Center Time: 2.0 Hr

1. TWS

2. Radar Switchology

TEST AND CRITIQUE ON RDR 6-7C

RD6-7T Examination
Lrn Center Time: 1.0 Hr

RADAR TIMELINE

RDR 8 Lecture
Classroom Time: 1.5 Hr

1. Radar Employment Definitions

2. Radar Timeline

RADAR ELECTRONIC ATTACK (EA)

RDR 9 Lecture Classroom Time: 2.0 Hr

1. Radar Principles Review

2. EA

3. Noise Jamming

4. Deception Jamming

5. Expendables

F-15 ELECTRONIC PROTECTION (EP)

RDR 10 Lecture Classroom Time: 3.0 Hr

1. F-15 Radar EP

2. F-15 EP Cues and Techniques to Combat Radar Jamming

AIM-7 EP
 AIM-120 EP

5. Special OFP

TEST AND CRITIQUE ON RDR 9-10

R9-10T Examination
Lrn Center Time: 1.5 Hr

SECTION M. F-15 WEAPONS EMPLOYMENT - Includes the following:

WEAPONS EMPLOYMENT - GUN

WPN 1 Lecture
Classroom Time: 2.0 Hr

- 1. System Description and F-15 Interface
- 2. Weapons Preflight
- 3. MPCD Indications
- 4. Switchology and Employment Procedures
- 5. Weapon Rules-of-Thumb and Employment Envelopes
- 6. Malfunctions and Corrective Actions
- 7. AFTTP 3-1 Shot and Kill Criteria

F-15 EMPLOYMENT INTRO, AIM-9/7/120

WPN 2 Lecture Classroom Time: 2.0 Hr

- 1. Cockpit Missile Displays, Switches and Cues
- 2. Missile Employment Rules-of-Thumb
- 5. Missile Preflight

TEST AND CRITIQUE ON WPN 1-2

WP1-2T Examination
Lrn Center Time: 2.0 Hr

WEAPONS EMPLOYMENT - AIM-9M

WPN 3 Lecture Classroom Time: 2.5 Hr

- 1. System Description and F-15 Interface
- 2. Weapon Preflight
- 3. MPCD Indication (SRM)
- 4. Switchology and Employment Procedures
- 5. Weapon Rules-of-Thumb and Employment Envelopes
- 6. Malfunctions, Corrective Actions, and Jettison Procedures
- 7. AFTTP 3-1 Shot and Kill Criteria

WEAPONS EMPLOYMENT - AIM-7

WPN 4 Lecture Classroom Time: 3.0 Hr

- 1. System Description and F-15 Interface
- 2. Weapon Preflight
- 3. MPCD Indication (MRM)
- 4. Switchology and Employment Procedures
- 5. Weapon Rules-of-Thumb and Employment Envelopes
- 6. Malfunctions, Corrective Actions, and Jettison Procedures
- 7. AFTTP 3-1 Shot and Kill Criteria

TEST AND CRITIQUE ON WPN 3-4

WPN3-4T Examination
Lrn Center Time: 2.0 Hr

WEAPONS EMPLOYMENT - AIM-120

WPN 5 Lecture Classroom Time: 3.0 Hr

- 1. System Description and F-15 Interface
- 2. Weapon Preflight
- 3. MPCD Indication (MRM)
- 4. Switchology and Employment Procedures
- 5. Weapon Rules-of-Thumb and Employment Envelopes6. Malfunctions, Corrective Actions, and Jettison Procedures
- 7. AFTTP 3-1 Shot and Kill Criteria

TEST AND CRITIQUE ON WPN 5

WPN 5T Examination
Lrn Center Time: 2.0 Hr

TEST AND CRITIQUE ON WPN 3-5 (TX)

WP3-5T Examination
Lrn Center Time: 2.0 Hr

1. Weapon Test for TX Track 1A/B, 2A/B and 3C.

WEAPONS EMPLOYMENT - AIM-9X (Non-Testable)

WPN 6 Lecture Classroom Time: 2.0 Hr

- 1. System Description and F-15 Interface
- 2. Weapon Preflight
- 3. MPCD Indication (SRM)
- 4. Switchology and Employment Procedures
- 5. Weapon Rules-of-Thumb and Employment Envelopes
- 6. Malfunctions, Corrective Actions, and Jettison Procedures

SECTION N. ADVANCED THEATER INTELLIGENCE - Includes the following:

ADVANCED THEATER INTELLIGENCE 1-2-3

1.0/2.0/2.0 Hr (Tk 2/3)

ATI 1/2/3 Lectures
Classroom Time: 3.5/3.0/3.0 Hr (B & Tk 1)

- 1. Theater Specific Environment
- 2. Operations Intelligence Interface

CBITS - ADVANCED THEATER INTELLIGENCE 4

ATI 4C CBITS
Lrn Center Time: 1.0

- 1. Theater Specific Environment
- 2. Operations Intelligence Interface

TEST AND CRITIQUE ON ATI 1-4

ATI T Examination
Lrn Center Time: 1.0 Hr

ADVANCED THEATER INTELLIGENCE 5

ATI 5 Lecture Classroom Time: 1.0

- Theater Specific Environment
 Operations Intelligence Interface
- SECTION O. TACTICAL ELECTRONIC WARFARE SYSTEM (TEWS) Includes the following:

TEWS - RWR

TEWS 1 Lecture
Classroom Time: 2.0 Hr

- 1. Operation
- 2. Display Interpretation
- 3. Capabilities and Limitations
- 4. Malfunctions and Corrective Actions

TEWS - ICS, CMD, EWWS

TEWS 2 Lecture Classroom Time: 2.0 Hr

- 1. Operation
- 2. Display Interpretation
- 3. Capabilities and Limitations
- 4. Malfunctions and Corrective Actions

CBITS - TEWS

TEWS3C CBITS
Lrn Center Time: 1.0 Hr

- TEWS
 Symbology
 - **TEST AND CRITIQUE ON TEWS 1-3C**

TEWS T Examination
Lrn Center Time: 2.0 Hr (B & Tk 1)

1.5 Hr (Tk 2/3)

SECTION P. F-15 IDENTIFICATION - Includes the following:

COMBAT ID

CID Lecture
Classroom Time: 2.0 Hr

- 1. Systems
- 2. Mission Planning
- 3. Employment
- 4. Authentication Procedures

TEST AND CRITIQUE ON CID

CID T Examination
Lrn Center Time: 1.0 Hr

SECTION Q. FIGHTER COMPARISON - Includes the following:

FIGHTER COMPARISON (Non-Testable)

FTR Lecture Classroom Time: 2.0 Hr

- 1. Fighter Performance/Comparison
- 2. Basic Comparison Features
- 3. EM Chart Interpretation and Comparison
- 4. BFM Comparison

SECTION R. INTERCEPTS - Includes the following:

PILOT/WEAPONS DIRECTOR INTERFACE

GCI Lecture/Demo Classroom Time: 3.5 (2.5/1.0) Hr

- 1. Procedures
 - (a) Weapons Director Procedures and Brevity Code
 - (b) Weapons Director/Pilot Responsibilities
 - (c) Operational Employment of GCI/AWACS Systems
 - (d) BRA and Digital Bullseye Format Tactical Control
 - (e) Training Rules
- 2. WD Mission Briefing
 - (a) Mission Review
 - (b) GCI Capabilities
 - (c) GCI Operating Procedures/Techniques
 - (d) Monitor Mission
 - (e) Debrief Mission

BASIC INTERCEPTS 1

BI 1 Lecture Classroom Time: 2.5 Hr

- 1. Review of Terminology
- 2. Intercept Geometry
- 3. Radar Search
- 4. Intercept Procedures

BASIC INTERCEPTS 2

BI2 Lecture Classroom Time: 2.5 Hr

- 1. Non-Standard Intercepts
- 2. No Lock Intercepts
- 3. Instrument Trail
- 4. Tanker Rendezvous

TEST AND CRITIQUE ON PILOT/WD INTERFACE & BASIC INTERCEPTS 1-2

GCIBIT Examination Lrn Center Time: 1.5 Hr

SECTION S. F-15 MISSION PLANNING - Includes the following:

CROSS COUNTRY FLIGHT PLANNING

MP 1 Lecture Classroom/Lrn Center Time: 1.5 Hr

- 1. Lecture
- 2. Portable Flight Planning Software (PFPS) Procedures/Demonstration
- 3. PFPS Practical Application

AFMSS INTRODUCTION/LAB

MP 2 Lecture/Demonstration Classroom

Time: 2.5 Hr

- 1. Components
- 2. System Use
- 3. Tactical Application

AFMSS MISSION PLANNING EXERCISE

MP 3 Practicum Classroom Time: 2.0 Hr

- 1. Environment
- 2. Resources
- 3. Planning Considerations
- 4. Planning Exercises

AFMSS EVALUATION

MP 4 Practicum
AFMSS Lab
Time: 3.0 Hr

- 1. Configuration
- 2. Planning Considerations
- 3. Line Sets and Terminal Loads
- 4. Program DTM
- 5. Evaluation in FMT

SECTION T. NIGHT/NVG ACADEMICS - Includes the following:

INTRODUCTION TO NIGHT VISION GOGGLES

N 1 Lecture Classroom Time: 2.0 Hr

- 1. Training Curriculum
- 2. Night Vision Sensors
- 3. Electromagnetic Spectrum
- 4. Anatomy of the Eye
- 5. Types of Vision
- 6. Dark Adaptation
- 7. Image Intensification Process
- 8. NVG Filters
- 9. NVG Visual Characteristics / System Designs
- 10. NVG Capabilities / Limitations

CBITS - THE NVG ENVIRONMENT

N 2C CBITS Lrn Center Time: 1.0 Hr

- 1. Types of Illumination
- 2. Obscurants

CBITS - NVG ADJUSTMENT

N 3C CBITS/Lecture
Lrn Center/ Time: 1.5 Hr
Classroom

- 1. NVG Components
- 2. Inspection and Adjustment Procedures
- 3. Focus Procedures
- 4. NVG Issues
- 5. Cockpit Procedures
- 6. Eye Lane

NVG PHYSIOLOGICAL FACTORS/MISPERCEPTIONS AND ILLUSIONS

N 4 Lecture Classroom Time: 1.5 Hr

- 1. Spatial Orientation/Disorientation
- 2. Fatigue/Circadian Rhythm Impacts
- 3. Aircraft Considerations
- 4. Common Misperceptions and Illusions
- 5. Contributors to Misperceptions and Illusions
- 6. Distance Estimation and Depth Perception
- 7. Susceptibility to Misperceptions and Illusions
- 8. Terrain Board (Kingsley Only; Time: 0.5 Hr)

NIGHT EMPLOYMENT

N 5 Lecture Classroom Time: 2.0 Hr

- 1. Night Philosophy / Preparation
- 2. Night Ground Ops
- 3. Night Flight Ops
- 4. Night Tactical Employment
- 5. Cockpit Trainer

TEST AND CRITIQUE ON N 1-5

N T Examination
Lrn Center Time: 1.0 Hr

SECTION U. F-15 INTELLIGENCE - Includes the following:

INTELLIGENCE COURSE OVERVIEW

IN 1 Lecture Classroom Time: 1.0 Hr

- 1. Intel Course Overview
- 2. Security Procedures
- 3. Introduction to Intelligence Disciplines
- 4. Introduction to Wing/Squadron Level Intelligence Support

INTRODUCTION TO VISUAL RECOGNITION

IN 2 Lecture Classroom Time: 1.0 Hr

- 1. Visual Recognition Tools
- 2. Visual Recognition Techniques
- 3. Visual Recognition Training
- 4. Visual Recognition Test Correctable to 100%

AIR TO AIR THREATS

IN 3 Lecture Classroom Time: 3.0 Hr 1. 2ND Thru 5th Generation Threats 2. Aircraft Systems (IFF, RWR, CMD, etc.) 3. Air to Air Missile Capabilities 4. Visual Recognition Review **SURFACE TO AIR THREATS IN** 4 Lecture Time: 3.0 Hr Classroom 1. Functions of an Integrated Air Defense System 2. Strategic/Tactical Surface to Air Missile System Capabilities 3. Anti-Aircraft Artillery Capabilities **THREAT TRAINING AND TACTICS** IN 5 Lecture Classroom Time: 3.0 Hr 1. Country Specific a. Pilot Selection and Training b. Aircraft Tactics c. Air Defense Tactics **TEST AND CRITIQUE ON IN 1-5** IN T Examination Classroom Time: 2.0 Hr **INTELLIGENCE REVIEW (TX)** IN TX Lecture Time: 2.0 Hr Classroom 1. Intelligence Refresher for TX Track 1A/B and 2A/B **SECTION V. F-15 AIR TO AIR EMPLOYMENT - Includes the following: OFFENSIVE BASIC FIGHTER MANEUVERS** AA 1 Lecture Classroom Time: 2.0 Hr 1. General Considerations 2. Offensive Maneuvering G-induced Loss of Consciousness (GLOC) **TEST AND CRITIQUE ON AA 1** AA 1T Examination Lrn Center Time: 1.0 Hr

DEFENSIVE BASIC FIGHTER MANEUVERS

AA 2 Lecture Classroom Time: 2.0 Hr

- 1. General Considerations
- 2. Defensive Maneuvering
 - (a) G-induced Loss of Consciousness (GLOC)

TEST AND CRITIQUE ON AA 2

AA 2T Examination
Lrn Center Time: 1.0 Hr

HIGH ASPECT BFM

AA 3 Lecture Classroom Time: 2.0 Hr

- 1. General Considerations
- 2. High Aspect Maneuvering
 - (a) G-induced Loss of Consciousness (GLOC)

TEST AND CRITIQUE ON AA 3

AA 3T Examination
Lrn Center Time: 1.0 Hr

INTRODUCTION TO TACTICAL INTERCEPTS (1v1)

AA 4 Lecture Classroom Time: 2.0 Hr

- 1. General Considerations and Tactics
- 2. WEZ Management
- 3. Radar/IR Missile Defense
- 4. Degraded Systems

TEST AND CRITIQUE ON RDR 8 AND AA 4

AA 4T Examination
Lrn Center Time: 1.5 Hr

DEFENSIVE AIR COMBAT MANEUVERS

AA 5 Lecture Classroom Time: 2.0 Hr

- 1. Engaged/Support Roles and Responsibilities
- 2. Engaged and Support Maneuvering
- 3. ACM Communication
- 4. Fight Re-entry
- 5. WEZ Separation
- 6. Weapons Deconfliction

1.5 Hr (Tk 2/3)

TEST AND CRITIQUE ON AA 5

AA 5T Examination
Lrn Center Time: 1.5 Hr

BEYOND VISUAL RANGE SHOT/KILL CRITERIA

AA 6 Lecture Classroom Time: 2.0 Hr

- 1. Definitions
- AIM 120 Kill Criteria
 AIM 7 Kill Criteria
- 4. ACMI Debrief Operations

TEST AND CRITIQUE ON AA 6

AA 6T Examination
Lrn Center Time: 1.0 Hr

ALL ASPECT AIR COMBAT MANEUVERS

AA 7 Lecture Classroom Time: 2.0 Hr

- 1. Short Range Radar / Commits
- 2. Visual Bracket Attack
- 3. VID Operations
- 4. RWR Interpretation
- 5. Element Defensive Response
- 6. Element VMS during AAMD
- 7. FDL Employment Considerations

TEST AND CRITIQUE ON AA 7

AA 7T Examination
Lrn Center Time: 1.5 Hr

LOW ALTITUDE OPERATIONS

AA 8 Lecture Classroom Time: 2.0 Hr (B & Tk 1)

- 1. Aircraft Handling Characteristics
- 2. Environmental Factors
- 3. Task Management
- 4. Low Altitude Tactical Navigation
- 5. Low Altitude Tactical Formation
- 6. Defensive Reactions
- 7. Factors Affecting Low Level Awareness
- 8. Special Subjects
- 9. Low Altitude Air-to-Air Employment

Videos: "How Low Can You Go?"

"Low Altitude Task Management"

"Visual Illusion"

TEST AND CRITIQUE ON AA 8

AA 8T Examination
Lrn Center Time: 1.0 Hr

TACTICAL INTERCEPTS (2vX)

AA 9 Lecture Classroom Time: 2.0 Hr

- 1. CAP Mechanics
- 2. Pre-Commit Pictures
- 3. Commit
- 4. Intercept/Targeting
- 5. FDL Employment Considerations
- 6. Meld
- 7. Crank/VMS
- 8. Multi-Targeting
- 9. Maneuvering Bandits
- 10. Drop/Split Criteria
- 11. Merge Prep/Canopy Code
- 12. Degraded Ops

TEST AND CRITIQUE ON AA 9

AA 9T Examination
Lrn Center Time: 1.0 Hr

MISSION EMPLOYMENT

AA 10 Lecture Classroom Time: 2.0 Hr

- 1. Theater Air Control System
- 2. Risk Level
- 3. Defensive Counter Air
- 4. Offensive Counter Air
- 5. Blue Force Integration
- 6. Post-Merge Singleton Operations
- 7. Scramble Ops

TEST AND CRITIQUE ON AA 10

AA 10T Examination
Lrn Center Time: 1.0 Hr

FOUR-SHIP EMPLOYMENT

AA 11 Lecture Classroom Time: 2.0 Hr

- 1. Four-Ship Formation
- 2. Four-Ship Radar Employment
- 3. Four-Ship Intercept Tactics
- 4. Four-Ship Targeting
- 5. Four-Ship Reset CAPs

TEST AND CRITIQUE ON AA 11

AA 11T Examination
Lrn Center Time: 1.0 Hr

SECTION W. PRE-GRADUATION PHASE - Includes the following:

TOP BOOK TEST

TB T Examination Lrn Center Time: 2.0 Hr

1. Comprehensive B-Course Final Examination

COMBAT MISSION PLANNING BRIEF

CMP Practicum Squadron Time: 4.0 Hr

- 1. B-Course-Led Combat Mission Brief
- 2. Instructor Questions and Critiques